

AKSENOV, I.Ya., kand.tekhn.nauk; MOKSHIN, L.S.; SHESTAKOV, A.I.;
TIKHONOV, K.K., kand.tekhn.nauk

Train traffic organization on lines with lengthened hauls. Zhel.
(MIRA 14:4)
dor. transp. 43 no. 1:21-28 Ja '61.

1. Nachal'nik sluzhby dvizheniya Kuybyshevskoy dorogi (for Mokshin).
2. Glavnnyy inzhener Omskoy dorogi (for Shestakov).
(Railroads—Traffic)

ZAGLYADIMOV, Dmitriy Petrovich; PETROV, Aleksandr Petrovich;
SERGEYEV, Yevgeniy Stepanovich; AKHRAMOVICH, L.K.,
retsenzent; VARGIN, S.N., retsenzent; YERMAKOV, A.A.,
retsenzent; KOZAK, V.A., retsenzent; MODZOLEVSKIY,
I.V., retsenzent; PERSHIN, B.F., retsenzent; PIVENSSTEYN,
D.I., retsenzent; PROKOF'YEV, A.G., retsenzent; SMETANIN,
A.I., retsenzent; SHESTAKOV, A.I., retsenzent; RYSHUK,
N.S., red.

[Organization of traffic in railroad transportation] Orga-
nizatsiia dvizheniia na zheleznodorozhnom transporte.
Izd.4. Moskva, Transport, 1964. 542 p. (MIRA 18:1)

SHESTAKOV, A. I.

Cold and pressure welding of light alloys. Avtom. svar. 17 no. 5:
10-14 My '64. (MIRA 17:11)

1. Institut elektrosvarki imeni Patona AN UkrSSR.

BELOUSOV, A.D., prof. (Novosibirsk); SHESTAKOV, A.I. (Novosibirsk)

Important potentials for the improvement of work conditions
and rest periods of locomotive crews. Zhel. dor. transp. 46
no.7:38-39 Jl '64. (MIRA 17:8)

1. Glavnnyy inzh. Zapadno-Sibirskoy dorogi (for Shestakov).

L 24800-66 EWT(m)/EWP(e)/EWP(k)/EWP(t) IJP(c) JD/WW/JG/NH

ACC NR: AP6011347

SOURCE CODE: UR/0226/66/000/003/0037/0041

AUTHOR: Shestakov, A. I.

52
3

ORG: Odessa Polytechnic Institute (Odesskiy politekhnicheskiy institut)

TITLE: Sintering of graphite ¹⁵ powders during chemical heat treatment with carbide-forming elements

SOURCE: Poroshkovaya metallurgiya, no. 3, 1966, 37-41

TOPIC TAGS: graphite, powder metal sintering, metal diffusion plating, metal surface impregnation, chromium, titanium, titanium compound, powder metallurgy

ABSTRACT: Chromizing and titanium impregnation of graphite powders of various granulometric composition and of compressed graphite blanks are discussed. The kinetics involved in obtaining chromium carbide coatings on graphite is examined. The possibility of obtaining titanium carbide coatings is shown. The main factors affecting the depth of coating and the sinterability of carbidized powders are established. Plasticizers, such as rubber solution in gasoline, have no effect on impregnation kinetics. [Based on author's abstract.]

[NT]

SUB CODE: 11/ SUBM DATE: 16Jun65/ ORIG REF: 002/

Card 1/1

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120017-1

SHESTAKOV, A. G.

DECEASED

Plant Physiology

see ILC

SECRET

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120017-1"

SHESTAKOV, Aleksandr Leonidovich, ISLANKINA, T.F., redaktor; GUBIN, M.I.,
tekhnicheskij redaktor

[Automatic equipment for fire control] Avtomaticheskie ustroistva
v bor'be s pozharami. Moskva, Izd-vo "Znanie," 1957. 37 p.
(Vsesoiuznoe obshchestvo po rasprostraneniju politicheskikh i
nauchnykh znanii. Ser. 4, no.7) (MIRA 10:9)
(Fire sprinklers)

SHESTAKOV, A.L., redaktor; VOLKOV, S.V., tekhnicheskiy redaktor

[Articles on fire fighting techniques in foreign countries]
Informatsionnyi sbornik; zarubezhnaya pozharnaya tekhnika.
Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1957. 130 p. (MLRA 10:7)

1. Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut
protivopozharnoy oborony.
(Fire extinction)

FETISOV, Petr Afinogenovich, inzh.; SHESTAKOV, A.L., red.; OTOCHEVA, M.A., red.izd-va; SALAZKOV, N.P., tekhn.red.

[Explosion hazard in gas mixtures, caused by electric sparks]
Vzryvoopasnost' elektricheskogo iskreniya v gazovykh smesiakh.
Moskva, Izd-vo M-va kommin.khoz.RSFSR, 1959. 76 p. (MIRA 12:12)
(Explosions)

SHESTAKOV, A.L., inzh.

Development of scientific research in the investigation of fires in Great Britain. Inform.zbor.TSN'TPO no.3:147-148 '59. (MIRA 14:3)
(Great Britain--Fire prevention--Research)

SHESTAKOV, A.L., red.; YERSHOV, P.R., vedushchiy red.; GANINA, L.V.,
tekhn.red.

[New methods and equipment for the extinction of petroleum
fires] Novye sposoby i sredstva tusheniia plameni neftepro-
duktov; sbornik statei. Moskva, Gos.nauchno-tekhn.izd-vo neft.
i gorno-toplivnoi lit-ry, 1960. 146 p.

(MIRA 13:11)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut
protivopozharnoy oborony.

(Fire extinction) (Petroleum products)

SHESTAKOV, A.L., red.; NIKOLAYEVA, T.A., red.izd-va; KHENOKH, E.M.,
tekhn. red.

[Collection of information "Fire prevention"] Informatsionnyi sbornik "Pozharnaya profilaktika." Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1961. 183 p. (MIRA 15:6)

1. Balashikha, TSentral'nyy nauchno-issledovatel'skiy institut protivopozharnoy oborony.

(Fire prevention)

SHABASH, L.Ye., gornyy inzh., ~~MAKSIMOV, A.M.~~, gornyy inzh., VNIIM, N.Ya.,
gornyy inzh.

Investigating stresses in the axis of unloading gate rollers of an
ISDM skip hoist. Gor. zhur. no.6:76-77 Je '65. (MIRA 18:7)

1. Institut Giprurudmash. Kolvay Reg.

BOCHAROV, V.I., inzh., otv. za vypusk. Prinimali uchastiye: SHESTAKOV,
A.N., inzh.; FROLOV, K.I., inzh.; SYSOYENKO, N.A., inzh.;
MOISEYEVA, V.G., inzh.; SIMAKOV, V.I., tekhnik; SEROV, V.I.,
tekhnik; BOBROVA, Ye.N., tekhn.red.

[Album of drawings of electric machinery of the N8 and VL23
electric locomotives] Al'bom chertezhei elektricheskikh mashin
elektrovozov N8 i VL23. Moskva, Vses.izdatel'sko-poligr.ob"edi-
nenie M-va putei soobshcheniiia, 1960. 325 p. (MIRA 13:10)

1. Novocherkasskiy elektrovozostroitel'nyy zavod.
(Electric locomotives)

SHESTAKOV, A.N.; ZHELEZNYAKOV, A.T.

Advice on the operation of transistory aluminum reactors of VL60 electric locomotives. Elek. i tepl. tia~~g~~ 7 no.11:18-20 N '63. (MIRA 17:2)

1. Rukovoditel' gruppy otdela transformatornogo oborudovaniya Novocherkasskogo elektrovozostroitel'nogo zavoda (for Shestakov). 2. Rukovoditel' gruppy Vsesoyuznogo nauchno-issledovatel'skogo instituta elektrovozostroyeniya (for Zheleznyakov).

ZHELEZNYAKOV, A.T.; SHESTAKOV, A.N.

Calculation of bridge reactors for N-60 electric locomotives. Sbor.
nauch. trud. ElNII 3:113-123 '63. (MIRA 17:4)

IVANOV, I.Ye.; SHESTAKOV, A.P.

Experience of the Dnepropetrovsk plant of food concentrates
in equipment maintenance. Kons.i ov.prom. 18 no.2:19-20
(MIRA 16:2)
F '63.

1. Dnepropetrovskiy zavod pishchevykh kontsentratov.
(Industrial equipment—Maintenance and repair)
(Dnepropetrovsk—Corn products)

SHESTAKOV, A.S.; OVSYANNIKOVA, Ye.N. [Ovsiannykova, YE.N.]

Use of natural gas in burners of ferrite soda furnaces
and melting pots. Khim. prom. [Ukr.] no.2:76-77 Ap-Je '63.
(MIRA 16:8)

1. Donetskiy sodovyy zavod.

S/196/61/000/011/028/042
E194/E155

AUTHOR: Shestakov, A.T.

TITLE: Determination of the edge temperatures of rotor cylinders during asynchronous starting of machines with solid rotors

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.11, 1961, 25, abstract 111 191, (Vestn. elektroprom-sti no.6, 1961, 29-30)

TEXT: A procedure of calculation has been developed which allows for the distribution of current over the thickness of the surface layer of the rotor that results from the current constriction effect. The instantaneous value of the heat evolved in the surface layer of thickness x of a rotor cylinder is given by the formula:

$$Q_x = 0.24 \int_0^t \left(\frac{M_2 s n_0}{975} + \frac{G D^2 n}{3600} \cdot \frac{dn}{dt} \right) (1 - e^{-2kx}) dt,$$

Card 1/ 2

✓

Determination of the edge temperatures... S/196/61/000/011/028/042
E194/E155

where: M_s - the static load torque, kg.m; s - slip;
 n_c - synchronous speed, r.p.m., GD^2 - flywheel torque of system,
 kg m^2 ; l - rotor length, cm; $k = \sqrt{\omega_p p / 2\rho}$; ω_p - the angular
speed of the rotor, radians/sec; ρ - the magnetic permeability
of the rotor steel in which changes during the starting time are
negligible, ρ - the specific resistance of the rotor steel,
 $\text{ohm mm}^2/\text{m}^2$. The method was used to determine the surface layer
temperature for a motor type STM-1500-2 (STM-1500-2) for a pump
type 14N12 x 2 (14N12 x 2) with a total flywheel torque of
 0.29 T m^2 . The thickness of the surface layer was taken to be
 0.5 mm , the calculated temperature was 103° and the test
temperature 90°C .

[Abstractor's note: Complete translation.]

Card 2/2

SHESTAKOV, A.V., inzhener.

Effect of node point rigidity on stress in a 22 meter prestressed reinforced concrete bridge span truss. Trudy Khab. IIT no.7:23-36 '54.
(MLRA 8:1)

(Bridges, Concrete) (Structural frames) (Concrete, Prestressed)

124-57-2-2485D

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 2, p 137 (USSR)

AUTHOR: Shestakov, A. V.

TITLE: Analysis of the Working of Massive Non-hinged Bridge Arches
Subjected to a Temporary Loading (Theoretical Investigation)
[Analiz raboty massivnykh bessharnirnykh mostovykh svodov
pod vremennoy nagruzkoj. (Teoreticheskoye issledovaniye)]

ABSTRACT: Bibliographic entry on the author's dissertation for the degree
of Candidate of Technical Sciences, presented to the Leningr. in-t.
zh. i transp. (Leningrad Institute for Rail Transportation En-
gineering). Leningrad, 1956

ASSOCIATION: Leningr. in-t inzh. zh.-d. transp. (Leningrad Institute for
Rail Transportation Engineering), Leningrad

1. Structures--Stresses

Card 1/1

SHESTAKOV, A.V., assistant.

Effect of delineating the axis of an unarticulated bridge span
subject to stress of temporary loading. Trudy Khab.IIT no.9:
112-166 '56. (MLRA 9:12)
(Arches)

FILIN, A.P., doktor tekhn. nauk prof. (Leningrad); SHESTAKOV, A.V.,
kand. tekhn. nauk (Khabarovsk)

Characteristic shape of bridge arches and vaults. Issl. po teor.
sooruzh. no.8:407-415 '59. (MIRA 12:12)
(Bridges--Design)

SHESTAKOV, A.V., kand.tekn.nauk, dotsent (Khabarovsk)

Effect of the nature of rigidity distribution along the axis of a
non-hinged bridge arch on strains from a live load. Issl. po teor.
sooruzh. no.10:222-237 '61. (MIRA 14:8)
(Bridges--Design)

SHESTAKOV, B., inzhener

Load characteristics of a municipal gas network in changing to
gas-heating stoves. Zhil.kom. khoz. 5 no.2:11-12 '55.
(MIRA 8:6)
(Gas--Heating and cooking)

SHESTAKOV, B., inzh.

Devices for easy starting of engines in winter. Avt. transp. 37
no. 2:23-25 F '59; .
(MIRA 13:1)
(Motortrucks--Cold weather operation)

GORBACHEVSKIY, V.; SHESTAKOV, B.; SAMODOV, G.

Vehicles for transporting long pipes. Avt. traps. 39 no.10:15-
17 0 '61. (MIRA 14:10)
(Pipe—Transportation)

GORBACHEVSKIY, Viktor Andreyevich; LESHKEVICH, Andrey Ivanovich;
MIKHAYLOVSKIY, Yuryi Vsevolodovich; SESTAKOV, Boris
Aleksandrovich; MEDNIKOV, I.N., retsenzent; MOROZOV, K.P.,
retsenzent; KHASMAN, P.Ya., otv. red.; PLESKO, Ye.P., red.;
GRECHISHCHEVA, Z.I., tekhn. red.

[Fundamentals of lumbering and the operation of machines and
mechanisms] Osnovy lesozagotovok i ekspluatatsiia mashin i me-
khanizmov. V.A.Gorbachevskii i dr. Moskva, Goslesbumizdat,
1961. 319 p. (MIRA 15:2)
(Lumbering--Machinery)

GORBACHEVSKIY, Viktor Andreyevich; GAL'PERIN, Zinoviy Samoylovich
Gal'perin; KLYCHKOV, Pavel Dmitriyevich; LAKH, Yevgeniy
Ivanovich; LEKSAU, Igor' Nikolayevich; PRASOLOV, Boris
Aleksandrovich; RYZHKOV, Aleksey Nikolayevich; SUKHARNIKOV,
Iosip Osipovich; SHESTAKOV, Boris Aleksandrovich; ALPATSKIY,
I.V., red.; PLESKO, Ye.P., red.izd-va; GRECHISHCHEVA, V.I.,
tekhn. red.

[Utilization of logging truck transportation] Ekspluata-
tsiya lesovoznogo avtomobil'nogo transporta. [By] V.A.
Gorbachevskii i dr. Moskva, Goslesbumizdat, 1962. 296 p.
(MIRA 16:5)

(Lumber--Transportation) (Tractor trains)

SHVETIKOV, B.A.

Kinematic inadequacy of linked wheel drive with an active breaking
up and the 4X2-type motor vehicle. Avt.prom. 31 no.5:13-17 My '65.
(MIRA 18:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut mekhanizatsii
i energetiki lesnoy promyshlennosti.

VARBOT, Zh.F., inzh.; SHESTAKOV, B.I., inzh.

Photoelectron devices for control of street lighting.
Energetik 8 no.2:3-4 F '60. (MIRA 13:6)
(Street lighting)

KAIPOV, R.L.; ZIV, D.M.; LEYPUNSKAYA, D.I.; SAVOSIN, S.I.; FEDOROV, V.V.;
PRADKIN, G.M.; SHIMELEVICH, Yu.S.; BASIN, Ye.M.; KUKHARENKO, N.K.;
SHESTAKOV, B.I.

Use of Ac - Be neutron sources in industrial geophysics. Atom energ.
16 no.3:269-270 Mr '64. (MIRA 17:3)

11(2)

SOV/112-59-3-4444

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 3, p 23 (USSR)
AUTHOR: Shestakov, B. I.

TITLE: On the Problem of Flameless Combustion of Natural Gas
(K voprosu o besplamennom szhiganii prirodnogo gaza)

PERIODICAL: Sb. nauchn. tr. Kuybyshevsk. industr. in-ta, 1957,
Nr 7, pp 149-156

ABSTRACT: Flameless combustion reduces to a minimum the chemical and mechanical unburned loss, air excess, reduces the losses from q_2 , raises the average temperature gradient, reduces furnace size, etc. Among its disadvantages are reduction of direct heat transfer and narrowing the range of stable gas burning along with an increase of the primary-air share. To ensure stable combustion, gas-air mixture is considerably preheated, or combustion stabilizers are used, or the direct heat transfer from the combustion zone is reduced. For burning naphthenic hydrocarbons (natural gases), which burn

Card 1/2

11(2)

SOV/112-59-3-4444

On the Problem of Flameless Combustion of Natural Gas

with much more difficulty than simple gases (CO, H₂, C₂H₂), a careful gas-air premixing is necessary, as well as a preheating of gas-air mixture and cutting of air excess down to zero. Visible flame is mostly a result of unburned loss of the fuel mass. In burning the natural gas from Pokhvistnevo-Buguruslan fields, the following values were investigated: optimum theoretical combustion temperature, average effective furnace temperature, degree of screening, blackness of the flame (α_f). The limit of 0.182 is not lower than for other types of fuel.

A.B.M.

Card 2/2

SHESTAKOV, B. I.: Master Tech Sci (diss) -- "Heat exchange in the combustion chamber in flameless combustion of high-calorie natural gases". Kuybyshev, 1953.
24 pp (Min Higher Educ USSR, Kuybyshev Industrial Inst im V. V. Kuybyshev), 150 copies (KL, No 17, 1959, 100)

KUDRYASHEV, L.I., doktor tekhn.nauk, prof.; SHESTAKOV, B.I., dots.

Method of calculating heat transfer in furnaces. Izv. vys. ucheb.zav.;
energ. no.6:75-79 Je '58. (MIRA 11:9)

1.Kuybyshevskiy industrial'nyy institut im. V.V. Kuybysheva.
(Heat--Transmission) (Furnaces)

NIKOL'SKIY, B.P.; ZIV, D.M.; SHESTAKOV, B.I.; SINITSYNA, G.S.

Effect of the nature and concentration of acid on the value
of the electrode potential of polonium. Trudy Radiev.inst.
AN SSSR. 8:153-157 '58. (MIRA 12:2)
(Polonium) (Acids) (Electromotive force)

SHESTAKOV, B.I., dots.

Role of convective heat exchange in the furnaces of boilers. Izv.vys.
ucheb.zav.; energ. no.12:78-82 D. '58. (MIRA 12:3)

1. Kuybyshevskiy industrial'nyy institut imeni V.V.Kuybysheva.
(Furnaces)

SHESTAKOV, B.I., dotsent

Heat exchange in boiler furnaces in the flameless burning of
gases of high calorific value. Sbor. nauch. trud. Kuib. indus.
inst. no.8:151-165 '59. (MIRA 14:7)
(Heat--Transmission) (Furnaces) (Gas as fuel)

ZHUKOV, A.N., inzh.; KUCHUGURENKO, A.P., dotsent, kand. tekhn. nauk;
MURAV'YEV, V.D., inzh.; UVAROV, G.A., dotsent, kand. tekhn. nauk;
FEDOROV, V.N., inzh.; SHESTAKOV, B.I., dotsent

Investigating combusting pulsations during burning of Kashpir shale
in furnaces with shaft-type impact mills. Izv. vys. ucheb. zav.; energ.
2 no.10:53-59 0 '59. (MIRA 13:3)

1. Kuybyshevskiy industrial'nyy institut imeni V.V. Kuybysheva.
Predstavlena sektsiyey prikladnoy teplotekhniki.
(Oil shales)

BELOUSOV, V.M., inzh.; VIDMANOV Yu.I., inzh.; STEPANYAN, A.A., inzh.
UVAROV, G.A., kand.tekhn.nauk; FEDOROV, V.N., inzh.; SHESTAKOV,
B.I., kand.tekhn.nauk

Measuring devices and methods for measuring pulsations in boiler
furnace systems. Izv. vys. ucheb. zav.; energ. 4 no.3:49-52
Mr '61. (MIRA 14:3)

1. Kuybyshevskiy industrial'nyy institut imeni V. V. Kuybysheva.
Predstavlena kafedroy tepolenergeticheskikh ustavovok.
(Transducers) (Boilers)

UVAROV, G.A., kand.tekhn.nauk; SHUSTAKOV, B.I., kand.tekhn.nauk;
FEDOROV, V.N., inzh.; GOFKO, M.K., inzh.; ANDREYEV, G.B., inzh.
ORLOV, A.V., inzh.

Simultaneous burning of anthracite culm and gas with different
methods for supplying the gas to the furnace. Teploenergetika
8 no.4:52-57 Ap '61. (MIRA 14:8)

1. Kuybyshevskiy industrial'nyy institut i Kuybyshevenergo.
(Furnaces)

VARBOT, Zh.F.; SHESTAKOV, B.I.

Circuits for the automatic switching-in of reserves at municipal
street lighting transformer points. Prom. energ. 16 no.4:6-8
Ap '61. (MIRA 14:9)

(Electric power distribution)
(Street lighting)

MANDEL, B.A.; GOLDKORN, V.S.

Centralized pharyngeal and ocular-cardiac reflex in schizophrenics.
Inquiry & Rev. med. Inst. 51:177-181 1968.

1. Klinika psichiatriske i neurologijskoj medicinskoj instituta. (MIRA 18:10)

SHLESIAKOV, I.I.

Oculocardiac reflex in schizophrenics. Trudy Ver. med. inst. 51:182-
187 '63. (MIRA 18:10)

1. Kafedra psichiatrii Voronezhskogo meditsinskogo instituta.

and practice of division, some in no interest whatever. Moreover, no multiplication, division, subtraction, or multiplication (including division) is given. (Additional exercises are given in the first section of the text.)

2. 1. 2. 3. 4. 5.

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120017-1"

DRUKOVANYY, M.F., kand. tekhn. nauk; YEFREMOV, E.I., gornyy inzh.;
TERESHCHENKO, A.A., gornyy inzh.; SHESTAKOV, F.K., kand. tekhn.
nauk; MALYY, I.S., gornyy inzh.

Crushing of rocks in blasting paired benches in the Central and
Ingulets Mining and Ore Dressing Combines in the Krivoy Rog
Basin. Vzryv. delo no.53/10:147-156 '63. (MIRA 16:8)

1. Otdel gornorudnykh problem AN UkrSSR (for Drukovanyy,
Yefremov). 2. TSentral'nyy gornoobogatitel'nyy kombinat
(for Tereshchenko, Shestakov). 3. Inguletskiy gornooboga-
titel'nyy kombinat (for Alekseyev, Malyy).
(Krivoy Rog Basin---Blasting)

ZHIROV, K.K.; SHESTAKOV, G.I.; IVANOV, I.B.

Interpretation of age figures obtained by the lead method.
Geokhimiia no.1:49-55 '61. (MIRA 14:3)

1. Institute of Geochemistry Siberian department of the
Academy of Sciences, U.S.S.R.
(Lead—Isotopes)
(Geological time)

SHESTAKOV, G.I.; IVANOV, I.B.

Graphic method of studying age discrepancies by the lead-uranium
ratios. Geokhimiia no. 3:239-242 '61. (MIRA 14:4)

1. Institute of Geochemistry of the Siberian Branch, Academy of
Sciences, U.S.S.R.
(Geological time) (Lead) (Uranium)

3/007/02/000/006/002/002
B107/B101

Author: Ulyanov, A. N., Shestukov, G. I., Ivankov, I. B.

Title: Letter to the Editor

Periodical: Geokhimiya, no. 3, 1962, p43

Abstract: In continuation of a previous paper (Geokhimiya, no. 1, 1961) the authors state that in the case of simultaneous loss of Pb and U(Th) from a mineral the total effect must be calculable from the equation:

$\lambda_{\text{eff}} = \lambda_{\text{U}}(1) - 1 - \frac{\lambda_{\text{U}}(1-n)}{\lambda_{\text{U}}(1-n) + \lambda_{\text{Pb}}(1-m)} \{ \exp(-\lambda_{\text{U}}t) - \exp(-\lambda_{\text{Pb}}t) \}$, whence an equation for $\text{Pb}^{207}/\text{Pb}^{206}$ can be derived. If the loss factors for lead and uranium (thorium) are equal (i. e., with $n = m$) this becomes $\lambda_{\text{eff}} = \lambda_{\text{U}}(1) - 1$. These conclusions and the related diagrams in the above-mentioned paper can be used only to compare two minerals, one without loss of lead and the other without loss of uranium (thorium).

Anal. by:

SHESTAKOV, G.N.

Well-head trough for the installation of PKR-U7 pneumatic
spiders on separate blocks without hoisting the drilling
rig foundations. Neft. khoz. 41 no.6:54-56 Je '63.
(MIRA 17:6)

SHESTAKOV, I.

Aleksandr Vorontsov's millions. Izobr.i rats. no.9:5 S '60.
(MIRA 13:10)

1. Chlen informatsionno-izdatel'skoy sektsii oblastnogo soveta Vsesoyus-nogo obshchestva izobretateley i ratsionalizatorov, g.Saratov.
(Saratov--Bearing industry--Technological innovations)

SHESTAKOV, I.

At the Belgorod-Dnistrovskiy Milling Combine. Muk.-elev. prom. 28 no.8:
17-18 Ag '62. (MIRA 17:2)

1. Sekretar' Belgorod-Dnistrovskogo gorodskogo komiteta Kommunisticheskoy partii Sovetskogo Sotsializma.

BERGEL'SON, I.G. (Moskva); NEDOLUZHKO, I.G. (Moskva); SHESTAKOV,
I.A. (Moskva)

Remarks on questions of terminology in transistor electronics. Izv. vvs. ucheb. zav.; radiotekh. 2 no.6:747-750 N-D
'59. (MIRA 13:6)

(Transistors--Terminology)

Poluprovodnikovye pribory i ikh prilozheniya; sbornik nauch. i tekhn. materialov. Collection of scientific and technical materials. No. 4)

(Semiconductors: Diodes and Their Applications; Collection of Scientific and Technical Materials, No. 4)

Mezhdunarodnoye izd-vo "Sovetskaya radio", 1960. 521 p. English slip inserted.

No. of copies printed not given.

Ed. (title page): Ya. A. Pashkov; Ed. (title book): I. M. Vol'kovich; Tech. Eds.: A. A. Svetlichny; Editorial Board: Ya. A. Pashkov (Sov. Ed.), N. A. Borodavko, L. G. Seregin, A. N. Hopulin, Yu. I. Galperin (Eng. Ed.), Yu. A. Kuznetsov, B. P. Kudryavtsev, A. V. Emel'yanov, A. A. Kallinovskiy, V. P. Nikolayev, N. A. Rulin, and I. P. Stepanenko.

PURPOSE: This collection of articles is for technicians and scientists working in the field of semiconductors.

COVERAGE: These articles cover the following problems: physical processes occurring in semiconductor diodes and transistors; parameters of transistors and methods for measurements for measuring their special features of transistors; operation in amplifying and oscillating circuits; and circuits and systems utilizing transistors. Several articles mention potentiometers. References discuss only most articles.

Morozov, P.V., Yu. S. Lovtsev, and G. G. Kostylev. A New Method of Determining DC-Characteristic Using Transistor With Standardized Temperature

253

The method proposed uses a static transistor characteristic

obtained under various temperatures.

Korobkov, Ye. M., and Ye. I. Sannikov. Diagrams of Pulse Automatic Frequency Control Using Semiconductor Components

The circuit is analyzed, selection of components considered, and some experimental results are given.

271

Mil'nik, G.N. Analysis of the Operation of a Transistorized Square-Wave Voltage Generator

The article examines the operating principle of a push-pull blocking oscillator using transistor triodes with a suitable transformer.

Kabanov, Yu. I. Use of Transistors for DC-Conversion

The article contains experimental data on the use of transistors for dc-to-converter.

393

Oliferenko, G.I. Calculation of Rectilinear Sustained Current in a Transistor Triode Oscillator

The article describes the method of calculating the rectilinear sustained current of a transistor rectifying oscillator using transistors. Specifications are given for defining roles of various type vacuum tubes.

325

Jakovlev, V.M. Research on a Junction Transistor Bidirectional Oscillator

The article describes processes occurring during the formation of the pulse peak. Conditions of bipolar oscillator self-sustained operation are examined and the formula for determining pulse duration is derived. Processes in delay line blocking oscillators are analyzed and formulas are given for calculating delay line parameters.

340

Selezneva, O.I. Blocking-Oscillator Using Semiconductor Transistor

The article describes the operation of a blocking-oscillator for pulse duration triode operation under saturation conditions. The parameters are given as substantial effect on pulse shape.

320

Bul'dyn, V.I. Operational Analysis of a Symmetrical Multivibrator Using Junction Transistors

357

Basic ratios for design of multivibrators using various operational circuit conditions are derived on the basis of a simplified multivibrator circuit using a junction transistor.

367

Kabanov, Yu. M. Comparative Evaluation of Multivibrators Using Point-Contact Transistors and Fields of Their Application

Special features of pulse oscillators using point-contact transistors are examined.

374

Morozov, N.G., and Yu. I. Sannikov. DC Multivibrator Using Junction Transistor

A device for measuring low constant e.m.f. source is described.

375

Bobrovnikov, I.Z. Transistor Pulse Meter for the Extra-High-Frequency Frequency Band

Three types of photomultiplier transistor circuits are described.

396

Vaynsler, Yu. P. Indication of the States of a Decade Transistor Counter by Means of Incandescent Lamps

A decade counter based entirely upon semiconductor devices is described.

406

Orlovaich, V.A. Development of a High-Speed Digital Computer

The unit, which uses a transistor of the P 16 type, was successfully tested.

AVAILABILITY: Library of Congress

9.2560

S/194/61/000/001/036/038
D216/D504

AUTHOR: Shestakov, I. A.

TITLE: A saturating transistor-triode blocking oscillator

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 1. 1961, 36, abstract 1 K297 (V Sb. Poluprovodnik pribory i ikh primeneniye. no. 4, M., Sov. radio. 1960. 340-356)

TEXT: An analysis is made of the processes occurring in a blocking-oscillator utilizing the saturation of a junction transistor triode. It is shown that the parameters of the triode have little effect on the pulse shape. From the analysis of comparatively simple equivalent circuits the relationships between the pulse parameters and repetition-frequency is derived. Possible configurations of the blocking oscillator circuit are discussed. The discrepancy between the calculated and experimental pulse shape does not exceed 15 to 30% (in many cases 2-5%) for the currents range from 10 mA to 8 amp and for pulse durations from 5 to 2000 microsec.

Card 1/2

1
B

A saturating transistor-triode

S/194/61/000/001/036/038
D216/b304

6 references

1
B

Card 2/2

S/181/61/003/001/037/042
B102/B204

AUTHORS: Bredov, M. M., Lepilin, V. A., Shestakov, I. B., and
Shakh-Budagov, A. L.

TITLE: The effect produced by the type of ions upon the character
of the change in the electrical properties of a semi-
conductor surface during its irradiation by ions of medium
energy

PERIODICAL: Fizika tverdogo tela, v. 3, no. 1, 1961, 267-274

TEXT: The effect produced by ion bombardment upon the surface properties
of semiconductors has hitherto not been sufficiently investigated; above
all, nothing is known about the effect produced by the type of ions, i. e.,
the most contradictory opinions have been expressed (Refs. 2 and 4). A
study of these questions is of both basic and practical value. If, e.g.,
the effect of bombardment does not depend on the type of ions, the effect
would have to be considered to be purely microthermal, and in the
opposite case, to be microchemical. Experiments, described in earlier

Card 1/6

S/181/61/003/001/037/042
B102/B204

The effect produced by the type of ions...

papers uniquely proved that different effects are produced by different ions. The present paper deals with a study of the volt-ampère characteristics of W-Ge and W-Si point contacts in the irradiation with atomic oxygen ions and molecular nitrogen ions of 5 and 10 kev. The experimental conditions were chosen in such a manner that an answer to the especially interesting questions (change in carrier mobility, carrier concentration of the scattering centers) could be expected. Theoretical considerations in this direction are discussed in detail; they led to the conclusion that an investigation of the volt-ampère characteristics of point contacts (investigation of direct and reverse currents and of the rectification constant between semiconductor and metal may supply the required information in a bombardment with ions of 5-10 kev. The radiation dose was varied within the range of from 10^{11} - 10^{15} ions/cm². The experiments were carried out by means of the mass separator described in Ref. 3. The ion source was gaseous (impact ionization); the irradiated specimens were n-type Ge and Si single crystals with a concentration ratio of the carriers of $n/n_0 = 1.10^{-9}$ and 7.10^{-9} , respectively. The individual measurements were repeated with due

Card 2/6

S/181/61/003/001/037/042

The effect produced by the type of ions...

B102/B204

frequency in order to keep the statistical error at a minimum. The results were evaluated according to M. O. Kornfel'd. Measurements are illustrated in Figs. 3 and 4. Fig. 3 shows the ratio of the rectification constant after irradiation to its value before irradiation as a function of the radiation dose for 5- and 10-kev ions. The difference between the effect of O and N₂ ions is obvious. Whereas N₂ ions do not change the carrier concentration considerably and increase the defect density only slightly (thus somewhat increasing the ohmic resistance), O ions increase the rectification constant (i.e., by forming a p-n junction in the "active zone" of the specimens, because the penetrating oxygen atoms act as acceptors). The rectification constant has a maximum at a certain dose (which is due either to a removal of the region of defect-carrier equilibrium from the active zone of the probe, or to an increase of the lattice defects, or to both). Fig. 4 shows the dependence of direct and reverse currents and rectification constant on the radiation dose N₀ (irradiation by 10-kev O and N₂ ions). The true value lies in the hatched region. There are 4 figures, 1 table, and 10 references: 5 Soviet-bloc and 5 non-Soviet-bloc.

✓

Card 3/6

The effect produced by the type of ions...

S/181/61/003/001/037/042
B102/B204

ASSOCIATION: Institut poluprovodnikov AN SSSR Leningrad (Institute of
Semiconductors, AS USSR, Leningrad)

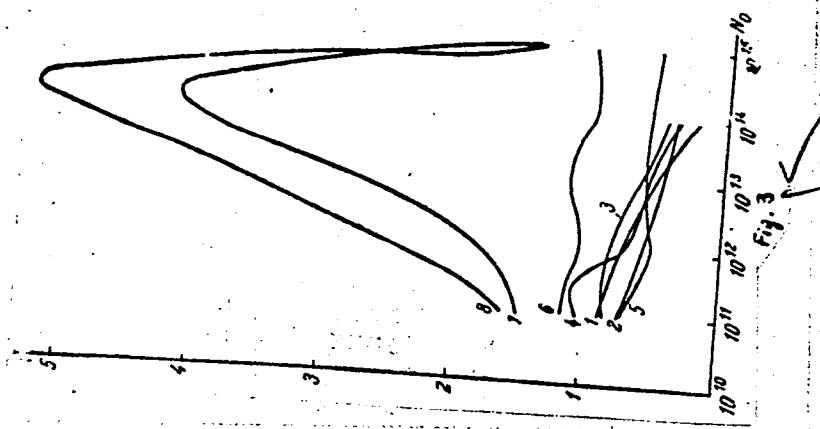
SUBMITTED: July 19, 1960

Card 4/6

The effect produced by the type of ions...

S/181/61/003/001/037/042
B102/B204

Legend to Fig. 3: 1) 10 kv, N₂ on
Ge; 2) 5 kv, N₂ on Ge; 3) 5 kv, O
on Ge; 4) 10 kv, O on Ge; 5) 5 kv,
N₂ on Si; 6) 10 kv, N₂ on Si;
7) 5 kv, O on Si; 8) 10 kv, O on Si.



Card 5/6

The effect produced by the type of ions...

S/181/61/003/001/037/042
B102/B204

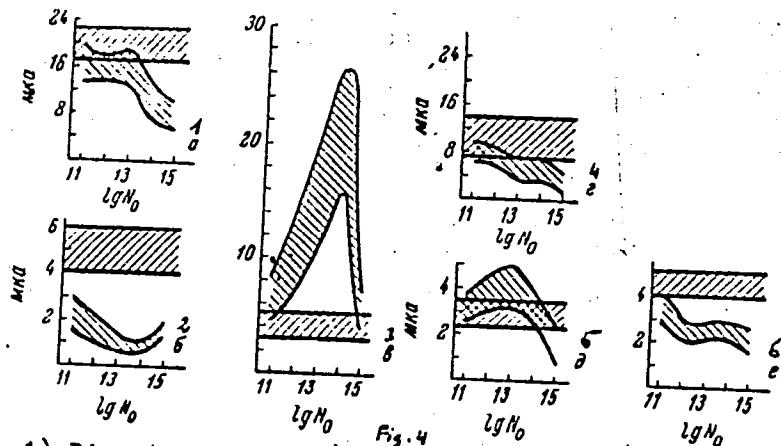


Fig. 4

Legend to Fig. 4: 1) Direct current, 2) reverse current, 3) rectification constant in bombarding with O; 4)-6) the same in bombarding with N₂. The horizontal hatched band gives the true value before irradiation.

Card 6/6

UPKIN, G.A.; SHESTAKOV, I.I.

Multiple manufacture of springs. Mashinostroitel' no.11:23 N '60.
(MIRA 13:10)

(Spring (Mechanism))

KAZHILAYEV, Nikolay Georgiyevich; SHESTAKOV, I.K., red.; LUKASHEVICH, V.,
tekhn.red.

[Potentialities for greater production in capital construction]
Rezervy proizvodstva v kapital'nom stroitel'stve. Saratov,
Saratovskoe knizhnoe izd-vo, 1959. 209 p.

(MIRA 14:1)

(Precast concrete construction)
(Construction industry--Accounting)

... , I. I. "Biology and Soil Chemistry and Soil Fertilization in Soil and Fertilizer Activity in Russia." * Descriptions for degrees in Soil and Fertilizer Science, offered at USSR Higher Educational Institutions in the Soviet Union. Moscow, Naukova Dumka, 1985

See: ... Biological Education, No. 3, 17 Jun 85

* For Degree of Doctor of Biological Sciences

USSR/Soil Science. Soil Genesis and Geography

5-2

Abc Jour : Ref Zhur - Biol., No 20, 1958, No 91559

Author : Shevtsov I.L.

Inst : Moldavian Affiliate of the AS USSR.

Title : Agro-meliorative Characteristics of Small River Valley Soils
in the Central Part of the Moldavian SSR

Abc ref : Rev. Nauk. fil. AM SSR, 1957, № 9, (№), 59-71

Abstract : The findings are set forth of a study of the properties of low-fertility soils in the bottom lands of small rivers: flood-land-marsh, meadow-marsh, flood-land-solonchak, flood-land-meadow and chernozem soils. Described are the morphology of the soils, the hydro-physical properties, the content of humus, CO_2 and water-soluble salts in the soils. The ordinary chernozems, meadow chernozems and meadow soils are recommended for use in growing vegetables and fodder crops. In order to bring into cultivation the muddy-marsh and meadow-marsh solonchak soils with near ground waters it is recommended that they be drained. The meadow solonchaks and

Card : 1/2

APPROVED FOR RELEASE: 07/13/2001 by CIA-RDP86-00513R001549120017-1

Abc Jour : Ref Zhur - Biol., No 20, 1958, No 91559

Meadow salt marsh soils are in need of washing. Surface control of the flooding of river valley soils is also recommended. -- F.I. Shcherbak

Card : 2/2

SHESTAKOV, I.L.

Bare fallows in Moldavia. Zemledelie 8 no.7:86-88 J1 '60.
(MIRA 13:9)

1. Pochvennyy institut imeni N.A. Dima Moldavskogo filiala AN SSSR.
(Moldavia-- Fallowing)

EL'LIANOV, I. .

"Impairment of Articulation Due to the Loss of Teeth in Cases With or Without Parodontitis,"
Stomatologiya, No. 2, 1996.

L 42870-66 EWT(1)/T-2 WM/GD

ACC NR: AT6028561

SOURCE CODE: UR/0000/66/000/000/0204/0216

AUTHOR: Shestakov, K. N.

36

BT/

ORG: none

TITLE: The problem of hydraulic similarity of centrifugal pumpsSOURCE: Lopatochnyye mashiny i struynnye apparaty (Vane machinery and jet apparatus);
sbornik statey, no. 1. Moscow, Izd-vo Mashinostroyeniye, 1966, 204-216

TOPIC TAGS: centrifugal pump, fuel supply, fuel pump, HYDRAULICS

ABSTRACT: The designs of high-hydraulic-head, high-capacity centrifugal pumps and the conditions under which experiments with pump models and at reduced velocities can be used by designers are investigated. It was assumed that, under certain conditions, there is a flow similarity in pumps at different circumferential velocities as well as with geometrically similar changes in the pump dimensions. Experiments were conducted with seven centrifugal and axial-centrifugal pumps of various parameters (inlet diameters, 0.4—0.7; impeller-blade exit angle, 20—55°; five blades; critical speeds 50—150). The effects of the circumferential velocity of the centrifugal impeller and the effect of the absolute pump dimensions on pump parameters were studied. The following results were obtained: 1) Dimensionless hydraulic-head characteristics of the pumps did not change during operation at various rpm as well as with geometrically similar changes in pump dimensions at $Re \geq 0.3 \cdot 10^6$ in the

UDC: 629.13.03:621.454:621.515

Card 1/2

C 42870-6/

ACC NR: AT6028561

impeller. 2) The similarity of cavitation phenomena at the centrifugal impeller inlet remained unchanged as the rpm changed. Orig. art. has: 10 figures. [BP]

SUB CODE: 13, 11/ SUBM DATE: 06Apr66/ ORIG REF: 002 ATD PRESS 5066

Card 2/2 *ftb*

MAKAROV, V.G.; FINKEL', S.M.; SHESTAKOV, K.T.; STARCHAKOVA, I.I.,
red.; KISELEVA, A.A., tekhn.red.

[Accounting in state commerce] Bukhgalterskii uchet v gosu-
darstvennoi torgovle. Moskva, Gos.izd-vo torg.lit-ry, 1960.
252 p. (MIRA 14:3)

(Accounting)

LARIONOV, L.A.; SHESTAKOV, L.Ya.

Comparative testing at the Dzhezkazgan ore dressing plant of
"Mekhanobr-6a" and "Sikhali" flotation. TSvet.met. 35 no.8:11-13
Ag '62. (MIRA 15:8)
(Flotation--Equipment and supplies)

SHESTAKOV, L.Ya.

Comparative testing of the "Sikhali" and "Mekhanobr-5"
flotation machines at the "Sikhali" Combine ore dressing
plant. Obog. rud 9 no.4:30-33 '64. (MIRA 18:5)

TRTKOVA, E.N.; SHESTAKOV, L. Ya.; VINOKUROV, A.I.; SAPRYKIN, V.I.;
LEBEREV, T.N.

Intensification of the performance of flotation machinery in
the dressing shops of the "Fosforit" Combine. Khim. prom. 41
no. 12:926-928 D '65. (MIRA 19:1)

15-57-8-10387

N. P. Gerasimov (1898-1952) (Cont.)

Severokamsk and Krasnokamsk oil fields is associated with the name of
Gerasimov.

Card 2/2

G. I. Denisova

SHNSTAKOV, M.F.; KRYUKOVA, I.A., red.; SVESHNIKOV, A.A., tekhn.red.

[Bibliography on the designing of radio transmitters for courses of study and work toward a diploma] Spravochnik literatury dlia kursovogo i diplomnogo proektirovaniia radioperedaiushchikh ustroistv. (MIRA 11:2) Moskva, Izd-vo "Sovetskoe radio," 1956. 27 p. (Bibliography--Radio--Transmitters and transmission)

N/5
101.11
.S54

SHESTAKOV, M G

Razgrom V. i. Leniny m idealisticheskoy sotsiologii narodnichestva (Destruction by Lenin of the ideological sociological national society) Moskva, Gospolitizdat, 1951

242 p.

Bibliographical footnotes

ACC NR: AP7000311

SOURCE CODE: UR/0413/66/000/022/0025/0025

INVENTOR: Levin, B. G.; Yermin, N. I.; Plyuta, V. Ye.; Shestakov, M. I.;
Vasil'yev, K. V.

ORG: none

TITLE: Method for manufacturing articles with variable cross section. Class 7,
No. 188454

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 25

TOPIC TAGS: cold rolling, variable cross section article, ~~and rolling~~
~~fabricated structural metal~~

ABSTRACT: This Author Certificate introduces a method for manufacturing articles with variable cross section by cold rolling of a stationary blank with two undriven rolls. To improve the dimensional accuracy and the surface quality of the article the blank is rotated after each working cycle around the longitudinal axis for a programmed angle and the amount of feed is automatically changed.

SUB CODE: 13/ SUBM DATE: 05Aug61/

Card 1/1

UDC: 621.771.65.04

SHESTAKOV, M.M.; POVZNER, Z.B., inzh.; ARSENT'YEV, A.I., kand. tekhn. nauk;
YESHCHEKO, A.A., gornyy inzh.

System of mining with lateral jugs and without cross trenches.
(MIRA 17:2)
Gor. zhur. no.2:9-12 F'62.

1. Zamestitel' glavnogo inzhenera TSentral'nogo gornoobogatitel'nogo kombinata (for Shestakov). 2. Trest po proyektirovaniyu zhelezorudnykh predpriyatiy Krivorozhskogo basseyna (for Povzner).
3. Krivorozhskiy gornorudnyy institut (for Arsent'yev, Yeshchenko).

SHESTAKOV, M.M., inzh.; MIKHAYLOV, V.A., kand. tekhn. nauk;
LOBODA, A.I., inzh.; RODIONOV, N.F., inzh.

Construction and operation of automobile roads in Krivoy
Rog Basin open-cut mines. Met. i gornorud. prom. no.5:
61-64 S-0 '63. (MIRA 16:11)

1. TSentral'nyy gornoobogatitel'nyy kombinat, Krivoy Rog
(for Shestakov). 2. Krivo~~ro~~zhskiy filial Instituta gornogo
dela AN UkrSSR (for Mikhaylov, Loboda, Rodionov).

NOVOZHILOV, M.G., prof., doktor tekhn. nauk; DRUKOVANYY, M.F., kand. tekhn. nauk; YEFREMOV, E.I., gornyy inzh.; TERESHCHENKO, A.A., gornyy inzh.; SHESTAKOV, M.M., gornyy inzh.; PIL'NIK, I.L., gornyy inzh.

Experience in blasting of high benches at the Krivoy Rog Basin Central Mining and Ore Dressing Combine. Gor. zhur. no.11: 29-33 N '63.

(MIRA 17:6)

1. Otdeleniye gornorudnykh problem AN UkrSSR (for Novozhilov, Drukovanyy, Yefremov). 2. TSentral'nyy Krivorozhskiy gorno-obogatitel'nyy kombinat (for Tereshchenko, Shestakov, Pil'nik).

"APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120017-1

2000 07 13, 11:00

2000 07 13, 11:00 (AP 5725)

TI 345.85

APPROVED FOR RELEASE: 07/13/2001

CIA-RDP86-00513R001549120017-1"

SHESTAKOV, M.N., dotsent, kandidat tekhnicheskikh nauk.

Construction of reinforced concrete reservoirs in the USA; from materials
of the foreign mission. Gcr.khoz.Mosk. 21 no.2:36-46 P '47. (MLRA 6:11)
(Reservoirs--United States) (United States--Reservoirs)

SHESTAKOV, M.N., dotsent, kandidat tekhnicheskikh nauk.

Mechanization of the construction of underground communication lines in the USA. (From materials of the foreign mission). Gor.khoz.Mosk. 21 no.3:33-41 Mr '47. (MLRA 6:11)

(United States--Excavating machinery)
(Excavating machinery--United States)

SHESTAKOV, M.N., dotsent, kandidat tekhnicheskikh nauk.

Scientific research study on Moscow's water supply and sewerage system. Gor.
khoz. Mosk. 21 no.6:21-23 Je '47. (MLRA 6:11)
(Moscow--Water supply) (Moscow--Sewerage)

AUTHOR: Shestakov, M.P. SAV/96-58-20/24

TITLE: Control formulae for gas analysis. (Kontrol'nye formuly dlya gazovogo analiza)

PERIODICAL: Teploenergetika, 1958, No.6. pp. 90-91 (USSR)

ABSTRACT: If a gas analysis is made at several successive sections in the gas flow, a certain formula is commonly recommended for use in checking that the results are consistent. This brief note proposes certain modifications to this formula. It is claimed that, in verifying the correctness of selection of gas sampling points and in checking the accuracy of analyses, the modified formula obviates preliminary determinations of the characteristics of the fuel or the CO content of the combustion products.

1. Gases--Analysis 2. Mathematics--Applications

Card 1/1

SHFSTAKOV, V.

Excavating Machinery

Proper operation of an excavator. Za ekon. mat. No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.

SHESTAKOV, N., mayor

The naval infantry attacks. Voen.znan. 41 no.11:10-11 N '65.
(MIRA 18:12)
1. Dvazhdy Krasnoznamenny Baltiyskiy flot.

SHESTAKOV, N., prepodavatel'

Study room for specialized subjects in the river navigation schools. Prof.-tekhn. obr. 21 no.10:22-23 O '64.
(MIRA 17:11)
1. Gorodskoye professional'no-tekhnicheskoye uchilishche No.8,
Novosibirsk.

SOV/137-58-9-18573

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 56 (USSR)

AUTHORS: Medzhibozhskiy, M.Ya., Sokolov, I.A., Shestakov, N.A.,
Vasil'yev, A.N.

TITLE: Compressed Air Blowing of Liquid Metal in Heavy-duty Open-hearth Furnaces (Vduvaniye kompressornogo vozdukh v zhidkuyu vannu bol'shegruznykh martenovskikh pechey)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Chernaya metallurgiya, 1958,
Nr 2 pp 34-47

ABSTRACT: A report on the results of 40 experimental smeltings carried out in the 390-ton open-hearth furnaces of the KMK (Kuznetsk Metallurgical Kombinat). Compressed air at a pressure of 3.5-5.0 atm gage was introduced into the hearth at a rate of 2500-2800 m³/hr by means of two water-cooled tuyeres installed in the crown of the furnace. The blowing commenced 1-1.5 hrs prior to melting and terminated at the beginning or the mid-point of the pure "boil" period. In the course of the experimental smeltings, the rate of decarbonization became considerably faster, the dephosphorization process more efficient, and the content of FeO in the slag increased by 6% at the end of the

Card 1/2

SOV/137-58-9-18573

Compressed Air Blowing of Liquid Metal in Heavy-duty Open-hearth (cont.)

melting stage. Instead of 1.0-1.5°C/min, as in the case of a standard smelting process, the temperature of the metal increased at a rate of 2.0-2.5°C/min. this made it possible to reduce the consumption of conventional fuel by an average of 7 kg per ton of ingots. In the process the degree of utilization of O₂ contained in the compressed air by the molten metal is increased by a factor of 4-8 owing to the increased supply O₂ from the atmosphere of the furnace. Compressed-air blowing at a pressure of 5.5 atm gage is equivalent in efficiency to blowing with pure O₂. The duration of a 390-ton melting process was reduced by 38 minutes on the average. The amount of dust being evolved during blowing does not exceed 1 g/m³. No noticeable wear was observed in the furnace lining. Overoxidation of metal in the course of the blowing process was absent; at the same time the content of N amounted to only 0.0033%. The finished metal contains H, O, N, and slag inclusions in quantities analogous to those contained in standard metals. Mechanical properties of the steel were not impaired.

V.G.

1. Open hearth furnace--Performance 2. Metals (Liquid)--Processing 3. Compressed air--Applications

Card 2/2

AUTHOR SHESTAKOV N.A., Deputy Director, Martin-Furnaces, PA-3056
Kuznetsk Metallurgical Combinat.

TITLE We Shall Exceed the Plan by 7000 Tons of Steel.
(Dadim sverkh plana 7000 tonn stali.- Russian)

PERIODICAL Metallurg 1957, Vol 2, Nr 4, pp 13 - 15 (USSR)

ABSTRACT Received: 5/1957 Reviewed: 7/1957
1932 saw the delivery of the first melt of the Martin furnace Nr 1; our combinat supplied the basic construction areas of the Five-Year-Plans with iron metals. These years were also years of learning the complicated steel melting methods for the former construction workers of the combinat who have remained here as metallurgical workers. They have succeeded in steadily increasing the output of steel by better organization of production, utilization of existent capacities, application of most recent techniques in furnace construction and heat technology, change of working methods, qualitative improvements, shortening of interruptions with an additional increase of the furnace path of the Martin furnaces. This was publicly recognized several times by the competent central authorities. In order to improve the charging, the loading capacity of the charging boxes was increased, and it will reach 1.75 m³ by 1957. Together

CARD 1/4

PA-3056

We Shall Exceed the Plan by 7000 Tons of Steel.

with the use of cruder scrap this will lead to a shortening of the duration of charging and thus also of the duration of melting. Greater boxes, however, also necessitate a strengthening of the means of charging. Since 1949, a change has been started from silica vaults to basic magnesite-chromite vaults, in 1953 the transition to bar suspended vaults was completed which resulted in a great prolongation of the life span of the Martin furnaces. This change made it possible to increase the heat intensity. Here it was necessary to strengthen the air ducts, and for this purpose the smokestacks were made higher, the blast was mounted on the same shaft as the engine, and the vacuum was increased to a pressure of 10 mm water column. The high temperatures made it necessary to strengthen lower part of the furnace, particularly the air mountings, the upper rows of which were made out of forsterite (fireproof material). In order to obtain a better distribution in the burner and a better utilization of the fuel, compression air is blown into the gas caisson in all furnaces, which brings about a sharp reduction in the consumption of gas. The personnel of the combine carried out together with the Central Laboratory and the Siberian Metallurgical Institute an extensive research program for the improvement

CARD 2/4

We Shall Exceed the Plan by 7000 Tons of Steel. PA-3056

of steel melting, for the reduction of the duration of melting, and for savings of raw and auxiliary materials: experiments of deoxidation of rail steel without blast furnace iron silicon, deoxidation of boiling steels in the evaporating boiler, melting of weakly alloyed metal in the large charging furnace, etc. Work towards qualitative improvement led to a sharp reduction of waste (47 % in 1956 as compared to 1951). 720,000 rubles of net costs were saved in 1956. In 1951-56 the system of suggestions existing in the combine resulted in 718 used suggestions which saved 4,500,000 rubles. The melting of dynamo steel was simplified by deoxidizing it in the boiler rather than in the furnace. The work at the hearth accretion was mechanized, deposphorization was changed. Together with the growth of the combine, an increase took place also in the number of those persons who were promoted from subsidiary to higher and more responsible positions. In 1957, the combine faces complicated tasks: The plan for January 1957 was not fulfilled. The reason for this will be found in the unsatisfactory

CARD 3/4

We Shall Exceed the Plan by 7000 Tons of Steel. PA - 3056

supplies of good ores and scrap. This state of affairs must be improved; also more efficient packing presses for light scrap must be installed.

(4 reproductions, of which 2 are pictures of persons)

ASSOCIATION: Kuznetsk Metallurgical Combinat, Stalinsk (Kuznetskiy metalurgicheskiy kombinat, Stalinsk)

PRESENTED BY: -

SUBMITTED: -

AVAILABLE: Library of Congress.

CARD 4/4

SHESTAKOV, N.F.; SHESTERNIN, M.F.

Detachable ball-shaped hammer for excavators used in crushing hard rocks. Rats. i izobr. predl. v stroi. no.79:19-20 '54. (MIRA 8:4)
(Excavating machinery)

SHESTAKOV, N.F., brigadir ekskavatorshchikov; IONOV, N.A., brigadir ekskavatorshchikov

Using excavators in cleaning and deepening reservoirs.
Suggested by N.F.Shestakov, N.A.Ionov. Rats.i izobr.predl.v
stroi. no.11:87-89 '59. (MIRA 13:3)

1. Leningradskoye upravleniye tresta Gidrospetsmetallurg-
stroy.
(Reservoirs)

YAKIMENKO, A.Ya.; SHESTAKOV, N.I.

Work of the Krasnodar Territory Veterinary and Sanitation
Station. Veterinariia 40 no.10:4-5 0:63. (MIRA 17:5)

1. Direktor Krasnodarskoy krayevoy veterinarno-sanitarnoy
stantsii (for Yakimenko). 2. Starshiy veterinarny vrach
Krasnodarskoy krayevoy veterinarno-sanitarnoy stantsii
(for Shestakov).